



ENTERTAINMENT EQUIPMENT SUPPLIES, S.L.
C/ Donostia 118
Apartado Postal 111
20115 ASTIGARRAGA (Guipúzcoa)
Tel. +34 943 33 71 50 . Fax +34 943 33 31 93
<http://www.ees.es> . E-Mail: info@ees.es

WIRELESS SOLUTION
MADE IN SWEDEN



SPECIFICATIONS



W-DMX™ BlackBox

Indoor series receivers

R-512
R-512 Pro

The W-DMX™ BlackBox range represents the pinnacle of wireless engineering excellence applied to the control of lighting systems.

Now in their third generation, many thousands of W-DMX™ BlackBox units have been supplied around the globe and remain in regular use within temporary and permanent installations. The latest generation includes significant advances in receiver sensitivity as well as greatly improved interference blocking and noise suppression.

The indoor series receivers provide a full complement of front panel indicators to allow you to check on operation. Of particular use is the five bar signal strength indicator which is a valuable aid when positioning receiver units, especially at the limits of their range or where obstructions exist in the path to the transmitter. As with all BlackBox units, configuration control is enabled via a single push button to provide the easiest user interface in the industry.

The indoor series receivers can be powered either from a mains AC power supply (90 to 260VAC) or alternatively fed from a 12VDC supply as required by each installation. Such instant flexibility explains why these units are gaining so many fans in lighting communities around the world.

All units are delivered with a multi purpose bracket for easy mounting and rigging as well as a standard 2 dBi rubber whip antenna. A multitude of other antennae options are available to raise the standard range of 700m (2300 feet) to an impressive 2300m (7550 feet). The indoor series receivers use the licence free 2.45GHz ISM band and are specifically certified for use in the United States, Canada, Japan and all European Union countries.

There are two receiver options within the indoor series:

R-512 Single DMX universe receiver.

R-512 Pro Single DMX universe receiver with internal battery backup to provide up to two hours operation without power input.

Both types of indoor series receivers are housed within tough diecast aluminium casings which are suitable for both indoor and fair weather outdoor operation.

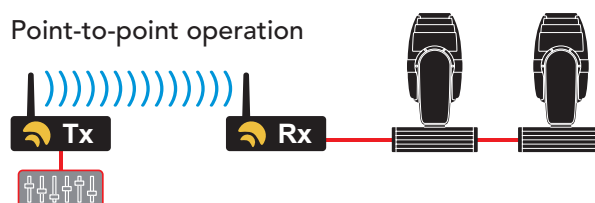
For all these reasons and more, in every independent comparison with competing products BlackBox W-DMX™ units continually take first place for distance covered, resilience against interference, and ease of installation and operation.



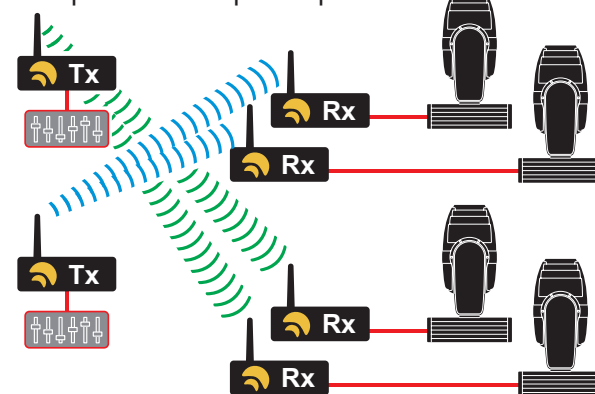
What is W-DMX™?

The W-DMX™ technology lies at the heart of every one of our BlackBox products. W-DMX™ is specifically engineered by Wireless Solution Sweden AB to provide the same quality, reliability and performance as any hardwired DMX data link. In fact W-DMX™ gives you greater freedom to create reliable point-to-point, point-to-multipoint and even multipoint-to-multipoint installations over large distances.

Point-to-point operation



Multipoint-to-multipoint operation



W-DMX™ is unique in its use of certain advanced radio techniques which are more often found in mobile phone and military communications. Rather than using fixed frequency channels, W-DMX™ uses adaptive frequency hopping technology (as well as TDMA and GFSK techniques) to continually check for interference and to rapidly move operation over to clear radio channels. The frequency hops occur one thousand times every second to ensure smooth, efficient and robust operation.

The advantage of such technology will quickly become clear to you: consistent and wide ranging control of your lighting systems over potentially great distances.



wireless
solution

Specifications

DMX interface

- Full compliance with USITT DMX-512 (1990) & 512-A standards
- Maximum number of transceivers on a single bus: 32 (compliant with the EIA/TIA RS-485 standard)
- Data Rate: 250 kbps (slew rate limited to minimise EMI)
- Electrostatic discharge protection: $\pm 15\text{kV}$
- DMX frame rate and frame size: Auto sensing
- Frame rate: 1 (min) to 44 (max) frames per second
- Frame size: 1 (min) to 512 (max) channels
- Loss of DMX input or radio link: After one second (if there is no resumption), the DMX output will cease to transmit and go into a high impedance mode.
- Recovery from loss of DMX input or radio link: Less than 1 second.

Power characteristics

- High voltage input: 90-260VAC
- Low voltage input: 12VDC (R-512 Pro: 12-24VDC)
- Average current : 200mA @ 12VDC

Battery operation (R-512 Pro only)

- 2 hours operation from fully charged

RF characteristics

W-DMX™ uses Adaptive Frequency Hopping Spread Spectrum (AFHSS) and changes frequency every 910uS

- Operational frequency range: 2402-2479MHz (ISM band)
- EU/ASIA RF output power: 20dBm or 100mW
- FCC RF output power: 25dBm or 275mW
- Channel bandwidth: 1 MHz
- Sensitivity at 0.1% Packet Error Rate: 95dBm
- Tested link range 450m (Low power EU mode using standard antennae in an urban area)

Approvals

- FCC: 15.247&68 Class B; Canada ICES 003; Japan ARIB STD-T66
- CE; EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2; EN 609 50

Enclosure

- Diecast aluminium casing
- Operating temp range: R-512: 0°C to +55°C (32°F to 131°F)
R-512 Pro: -20°C to +55°C (-4°F to 131°F)
- Dimensions (W x H x D): 219 x 45 x 131mm (8.6" x 1.8" x 5.2")
- Weight: 1005g / 35.45oz

Connectors

- N-type female antenna connector, N – RP-SMA adaptor included
- 2 Neutrik® XLR 5-pin gold plated DMX connectors
- 2 RJ45, DMX over Cat5 cable links
- 1 DC input, pluggable terminal strip, Phonix® MSTB 2,5
- 1 AC input, IEC-6C

Supplied accessories

- AC power cord / DC power connector / Standard antenna
Antenna adaptor / Mounting brackets / User guide

Part codes

ETSI/FCC approved

(power output:
100mW/300mW max.)

Japan ARIB approved

(power output:
100mW max.)

R-512

A40102

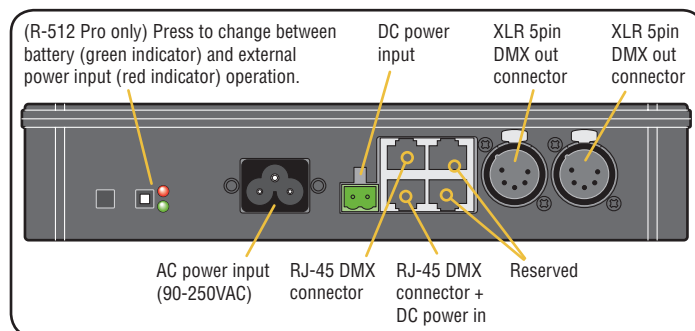
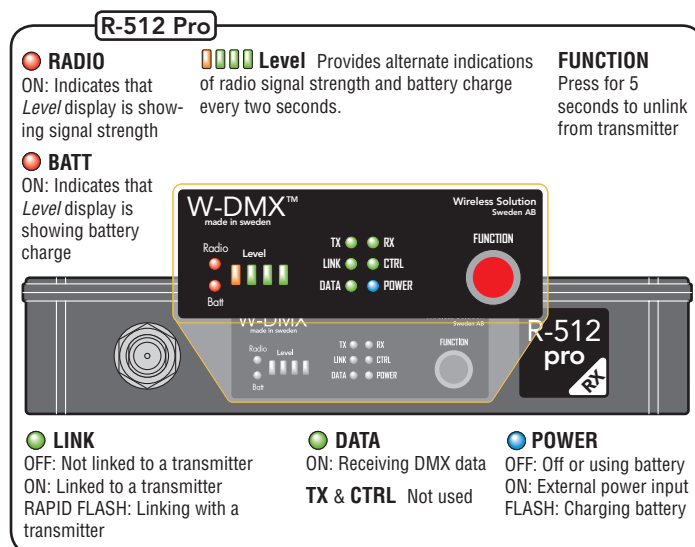
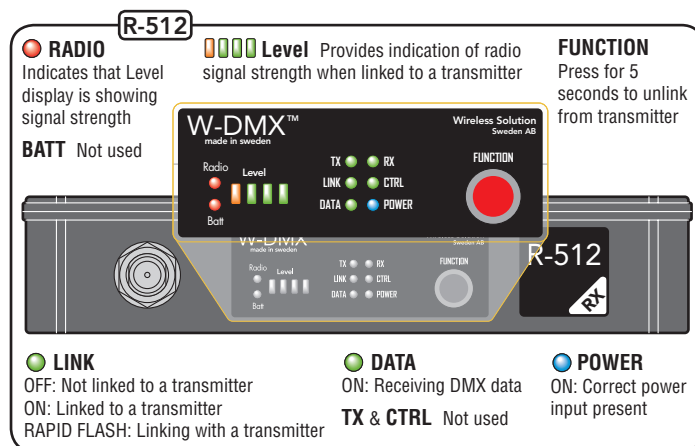
A40102J

R-512 Pro

A40104

A40104J

Front and rear panel details



Release 1-0d (October 2007) Specifications subject to change without notice



W-DMX BlackBox

Indoor series transmitters

S-1
S-2
T-1 Pro

The W-DMX BlackBox range represents the pinnacle of wireless engineering excellence applied to the control of lighting systems.

In common with all W-DMX BlackBox products, the indoor series transmitters offer simple setup and reliable operation. Minimal cabling requirements and multiple power input options ensure that the transmitters can be easily incorporated into new and existing installations. The initial configuration procedure couldn't be simpler. Just one press of the front panel button is all that's required to search for, and link with unallocated receivers. That's it. Operation can then begin immediately to control any fixtures that are DMX cabled to the receivers.

There are three main transmitter options within the indoor series to suit your exact requirements:

- S-1** Single DMX universe transmitter.
- S-2** Dual DMX universe transmitter.
- T-1 Pro** Single DMX universe transceiver with internal battery backup to provide up to two hours operation without power input. T-1 Pro units can be switched between transmitter and receiver modes as required. Two T-1 Pro units (one in each mode) can be wired together to create a signal repeater to extend transmission distances even further.

All units are delivered with a multi purpose bracket for easy mounting and rigging as well as a standard 2 dBi rubber whip antenna. A multitude of other antennae options are available to increase the standard transmission range of 700m (2300 feet) to an incredible 2300m (7550 feet). All indoor series transmitters use the licence free 2.45GHz ISM band and are specifically certified for use in the United States, Canada, Japan and all European Union countries. The efficient automated anti-interference techniques employed provide another distinct advantage. In order to send multiple DMX universes, you can place numerous BlackBox transmitters in close proximity without harming transmission signals - a real advantage for large, distributed installations.

All indoor series transmitters are housed within tough diecast aluminium casings which are suitable for both indoor and fair weather outdoor operation.

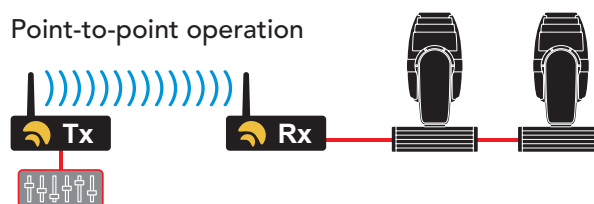
For all these reasons and more, in every independent comparison with competing products BlackBox W-DMX units continually take first place for distance covered, resilience against interference, and ease of installation and operation.



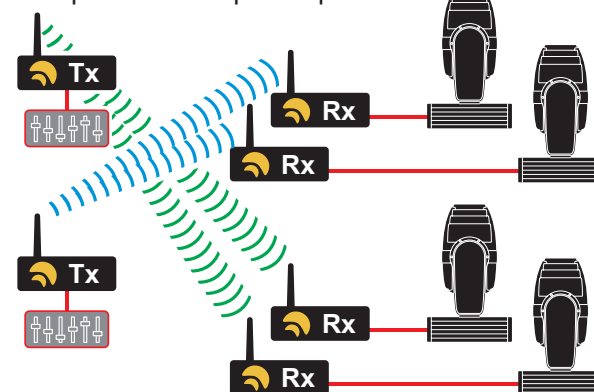
What is W-DMX?

The W-DMX technology lies at the heart of every one of our BlackBox products. W-DMX is specifically engineered by Wireless Solution Sweden AB to provide the same quality, reliability and performance as any hardwired DMX data link. In fact W-DMX gives you greater freedom to create reliable point-to-point, point-to-multipoint and even multipoint-to-multipoint installations over large distances.

Point-to-point operation



Multipoint-to-multipoint operation



W-DMX is unique in its use of certain advanced radio techniques which are more often found in mobile phone and military communications. Rather than using fixed frequency channels, W-DMX uses adaptive frequency hopping technology (as well as TDMA and GFSK techniques) to continually check for interference and to rapidly move operation over to clear radio channels. The frequency hops occur one thousand times every second to ensure smooth, efficient and robust operation.

The advantage of such technology will quickly become clear to you: consistent and wide ranging control of your lighting systems over potentially great distances.



wireless
solution

Specifications

DMX interface

- Full compliance with USITT DMX-512 (1990) & 512-A standards
- Maximum number of transceivers on a single bus: 32 (compliant with the EIA/TIA RS-485 standard)
- Data Rate: 250 kbps (slow rate limited to minimise EMI)
- Electrostatic discharge protection: $\pm 15\text{kV}$
- DMX frame rate and frame size: Auto sensing
- Frame rate: 1 (min) to 44 (max) frames per second
- Frame size: 1 (min) to 512 (max) channels
- Loss of DMX input or radio link: After one second (if there is no resumption), the DMX output will cease to transmit and go into a high impedance mode.
- Recovery from loss of DMX input or radio link: Less than 1 second.

Power characteristics

- High voltage input: 90-260VAC
- Low voltage input: 12VDC (T-1 Pro and S-2: 12-24VDC)
- Average current (transmit mode): 450mA @ 12VDC
- Average current (T-1 receive mode): 200mA @ 12VDC

Battery operation (T-1 Pro only)

- 1 hour operation from fully charged in transmit mode
- 2 hours operation from fully charged in receive mode

RF characteristics

W-DMX™ uses Adaptive Frequency Hopping Spread Spectrum (AFHSS) and changes frequency every 910uS

- Operational frequency range: 2402-2479MHz (ISM band)
- EU/ASIA RF output power: 20dBm or 100mW
- FCC RF output power: 25dBm or 275mW
- Channel bandwidth: 1 MHz
- Sensitivity at 0.1% Packet Error Rate: 95dBm
- Tested link range 450m (Low power EU mode using standard antennae in an urban area)

Approvals

- FCC: 15.247&68 Class B; Canada ICES 003; Japan ARIB STD-T66
- CE; EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2; EN 609 50

Enclosure

- Diecast aluminium casing
- Operating temp range: S-1 / S-2: 0°C to +55°C (32°F to 131°F)
T-1 Pro: -20°C to +55°C (-4°F to 131°F)
- Dimensions (W x H x D): 219 x 45 x 131mm (8.6" x 1.8" x 5.2")
- Weight: 1005g / 35.45oz

Connectors

- N-type female antenna connector, N – RP-SMA adaptor included
- 2 Neutrik® XLR 5-pin gold plated DMX connectors
- 2 RJ45, DMX over Cat5 cable links
- 1 RJ45, W-DMX PC-link / Internal link (T-1 Pro only)
- 1 DC input, pluggable terminal strip, Phonix® MSTB 2,5
- 1 AC input, IEC-6C

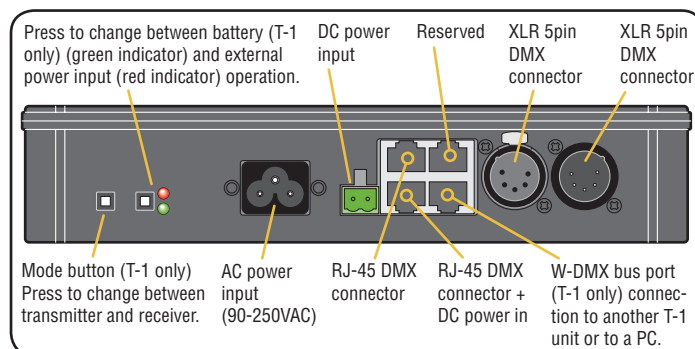
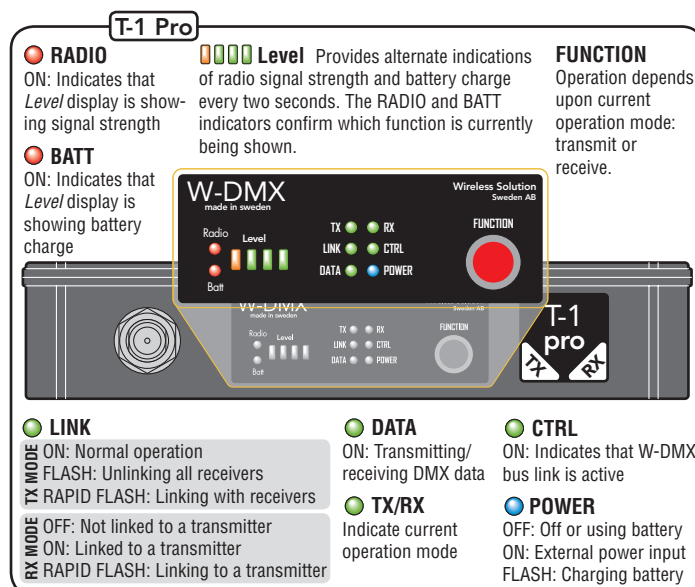
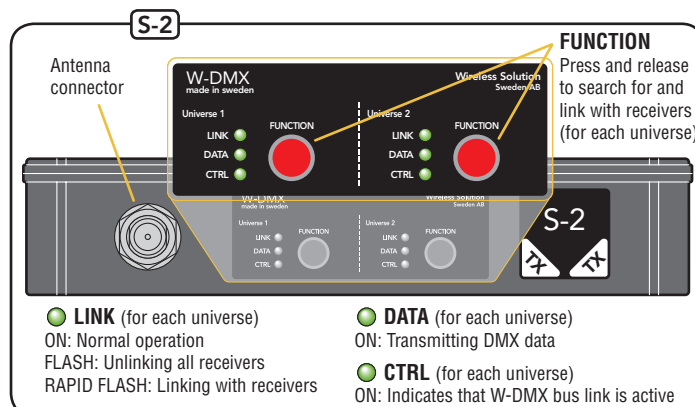
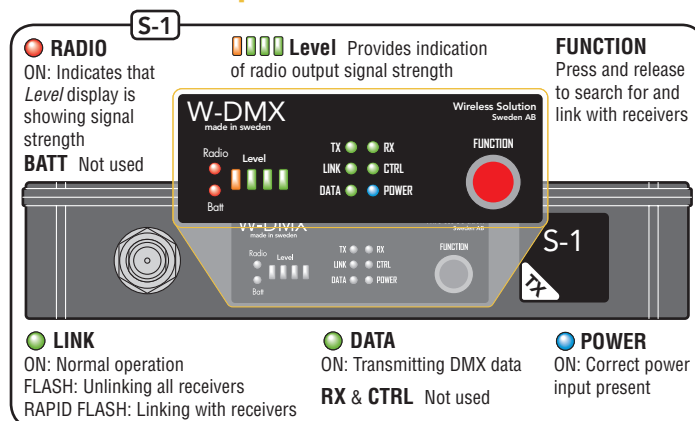
Supplied accessories

- AC power cord / DC power connector / Standard antenna
- Antenna adaptor / Mounting brackets / User guide

Part codes

	S-1	S-2	T-1 Pro
ETSI/FCC approved (power output: 100mW/300mW max.)	A40001	A40005	A40003
Japan ARIB approved (power output: 100mW max.)	A40001J	A40005J	A40003J

Front and rear panel details



Release 1-0d (October 2007) Specifications subject to change without notice



W-DMX BlackBox Micro series

S-1 Micro
R-512 Micro
R-512 Micro Lite

The W-DMX BlackBox range represents the pinnacle of wireless engineering excellence applied to the control of lighting systems.

The new Micro series builds upon the considerable successes of the full size BlackBox range. Thanks to advances in circuit miniaturisation, we have managed to fit the complete W-DMX system into a compact package with less than half the volume of the full size casing. Incredibly this includes a powerful battery backup system (not the Lite version) and even the antenna.

The battery backup system (not the Lite version) can be utilised in two ways depending on the installation requirements and availability of power. Where power is available but not always reliable, the Micro unit's battery system performs the role of an uninterruptable power supply, ensuring seamless operation during outages. Alternatively, in situations where power is difficult to feed to the Micro unit's location, it can provide up to eight hours continuous independent operation from a full charge. When power is available, the Micro units can accept low voltage inputs in the range 12 to 24VDC.

Drawing on our considerable experience in wireless communications, the internal antenna uses next generation AIDA® technology to provide extended operational range compared to conventional omnidirectional antennae.

Diminutive size does not mean that you lose the feature set expected of all W-DMX BlackBox products. The Micro series units present exactly the same control panel with its clear status indications and intuitive single button control. The Micro units are also fully compatible with all other members of the W-DMX range so that they can be mixed and matched as necessary.

There are three options within the Micro series:

S-1 Micro Single DMX universe transmitter with battery backup and internal antenna.

R-512 Micro Single DMX universe receiver with battery backup and internal antenna.

R-512 Micro Lite Single DMX universe receiver with internal antenna.

All Micro options are housed within a tough injection moulded plastic case featuring a multi-purpose mounting bracket for easy rigging in a variety of applications. The bracket can be rotated in 45 deg. increments to allow the Micro to be positioned in the optimum orientation.

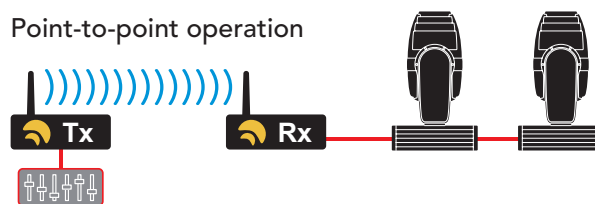
We believe that the impressive combination of miniaturisation, toughness, flexibility and ease of use makes the Micro series a natural selection for a variety of demanding applications. After using them, we feel sure that you will agree.



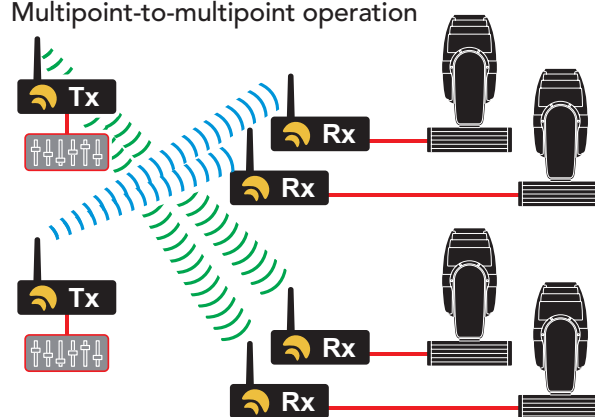
What is W-DMX?

The W-DMX technology lies at the heart of every one of our Black-Box products. W-DMX is specifically engineered by Wireless Solution Sweden AB to provide the same quality, reliability and performance as any hardwired DMX data link. In fact W-DMX gives you greater freedom to create reliable point-to-point, point-to-multipoint and even multipoint-to-multipoint installations over large distances.

Point-to-point operation



Multipoint-to-multipoint operation



W-DMX is unique in its use of certain advanced radio techniques which are more often found in mobile phone and military communications. Rather than using fixed frequency channels, W-DMX uses adaptive frequency hopping technology (as well as TDMA and GFSK techniques) to continually check for interference and to rapidly move operation over to clear radio channels. The frequency hops occur one thousand times every second to ensure smooth, efficient and robust operation.

The advantage of such technology will quickly become clear to you: consistent and wide ranging control of your lighting systems over potentially great distances.



wireless
solution

Specifications

DMX interface

- Full compliance with USITT DMX-512 (1990) & 512-A standards
- Maximum number of transceivers on a single bus: 32 (compliant with the EIA/TIA RS-485 standard)
- Data Rate: 250 kbps (slew rate limited to minimise EMI)
- Electrostatic discharge protection: $\pm 15\text{kV}$
- DMX frame rate and frame size: Auto sensing
- Frame rate: 1 (min) to 44 (max) frames per second
- Frame size: 1 (min) to 512 (max) channels
- Loss of DMX input or radio link: After one second (if there is no resumption), the DMX output will cease to transmit and go into a high impedance mode.
- Recovery from loss of DMX input or radio link: Less than 1 second.

Power characteristics

- Low voltage input: 12-24VDC
- Average current: 200mA @ 12VDC
- Maximum current (charging battery): 400mA @ 12VDC

Battery operation

- Receivers: 6 hours operation from full charge
- Transmitters: 2 hours operation from full charge

RF characteristics

W-DMX™ uses Adaptive Frequency Hopping Spread Spectrum (AFHSS) and changes frequency every 910uS

- Operational frequency range: 2402-2479MHz (ISM band)
- EU/ASIA RF output power: 20dBm or 100mW
- FCC RF output power: 25dBm or 275mW
- Channel bandwidth: 1 MHz
- Sensitivity at 0.1% Packet Error Rate: 95dBm
- Tested link range 450m (Low power EU mode using standard antennae in an urban area)

Approvals

- FCC: 15.247&68 Class B; Canada ICES 003; Japan ARIB STD-T66
- CE; EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2; EN 609 50

Enclosure

- Operating temperature range: 0°C to +55°C (32°F to 131°F)
- Dimensions (W x H x D): 115 x 40 x 70mm (4.5" x 1.6" x 2.8")
- Weight: 250g / 8.8oz

Connectors

- 1 Neutrik® XLR 5-pin gold plated DMX connector
- 1 RJ45, DMX over Cat5 cable link / power input

Supplied accessories

- RJ45 (DC) power cord / Mounting bracket / User guide

Part codes

	S-1 Micro	R-512 Micro	R-512 Micro Lite
ETSI/FCC approved (power output: 100mW/300mW max.)	A40006	A40101	A40100
Japan ARIB approved (power output: 100mW max.)	A40006J	A40101J	A40100J

Front and end panel details

S-1 Micro

RADIO
ON: Indicates that *Level* display is showing signal strength

BATT
ON: Indicates that *Level* display is showing battery charge

LINK
ON: Normal operation
FLASH: Unlinking all receivers
RAPID FLASH: Linking with receivers

DATA
ON: Transmitting DMX data
RX & CTRL Not used

FUNCTION
Press and release to search for and link with receivers

POWER
OFF: Switched off or using battery
ON: External power input
FLASH: Charging battery

R-512 Micro

RADIO
ON: Indicates that *Level* display is showing signal strength

BATT
ON: Indicates that *Level* display is showing battery charge

LINK
OFF: Not linked to a transmitter
ON: Linked to a transmitter
RAPID FLASH: Linking with a transmitter

DATA
ON: Receiving DMX data
TX & CTRL Not used

FUNCTION
Press for 5 seconds to unlink from transmitter

POWER
OFF: Switched off or using battery
ON: External power input
FLASH: Charging battery

R-512 Micro Lite

RADIO
ON: Indicates that *Level* display is showing signal strength

BATT
Not used

DATA
ON: Receiving DMX data
TX & CTRL Not used

LINK
OFF: Not linked to a transmitter
ON: Linked to a transmitter
RAPID FLASH: Linking with a transmitter

FUNCTION
Press for 5 seconds to unlink from transmitter

POWER
OFF: Switched off
ON: External power input

Battery button & indicators - Press to change between battery (green indicator) and external power input (red indicator) operation. Not Micro Lite.

Fade button - Press to fade off/on the top panel indicators. Note: When running from the internal battery, the indicators fade off automatically to conserve power. Not Micro Lite.

XLR 5pin DMX connector

RJ-45 DMX connector plus DC power in

Release 1-0d (October 2007) Specifications subject to change without notice



W-DMX BlackBox

Outdoor series

S-1 Outdoor
S-2 Outdoor
R-512 Outdoor
RP-512 Outdoor

The W-DMX BlackBox range represents the pinnacle of wireless engineering excellence applied to the control of lighting systems.

The outdoor series is where an already resilient family of products become even tougher. Whenever you require wireless control in unforgiving environments, whether permanently or temporarily installed, the outdoor series will provide the solution.

Every member of the outdoor series is contained within a fully sealed casing with high specification glands for all cable access points. Thanks to these measures, each unit achieves a full IP65 environmental rating, despite allowing for quick internal access. Internally, all components are specified to provide a wide operational range from -30°C to +55°C (-22°F to 131°F); making these units as comfortable with a Scandinavian winter as they are with a middle eastern summer.

All models provide flexibility in their power options, with the choice of a variable mains input between 90 to 260VAC or a low voltage input of 12VDC according to the installation requirements. All models also exhibit the same ease of use as their indoor equivalents by utilising the same control panel with clear status indications and intuitive single button control. The outdoor units are also fully compatible with all other members of the W-DMX range so that they can be mixed and matched as necessary.

A choice of various antennae options are available to extend the standard transmission range of 700m (2300 feet) to an incredible 2300m (7550 feet). All outdoor series models use the licence free 2.45GHz ISM band and are specifically certified for use in the US, Canada, Japan and all European Union countries.

There are four options within the outdoor series:

S-1 Single DMX universe transmitter.

S-2 Dual DMX universe transmitter.

R-512 Single DMX universe receiver.

RP-512 Single DMX universe repeater.

The RP-512 repeater provides the ability to significantly extend the existing transmission range or to assist in negotiating around awkward obstacles in its role as a 'corner bender'.

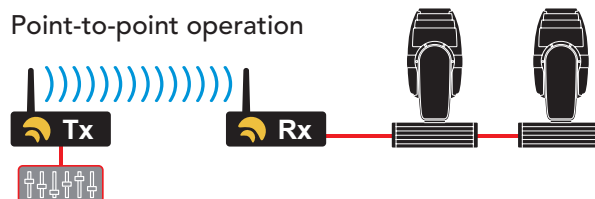
To complete your installation in style, a range of enclosure covers are available for the outdoor series. In addition to their practical use in protecting the casing from direct sunlight, the covers are available in a range of colours to allow each installation to blend perfectly with its surroundings.



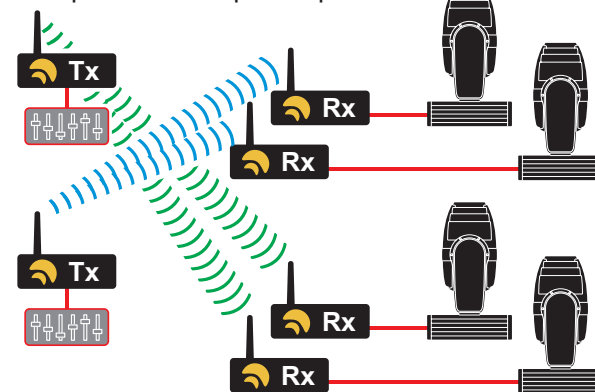
What is W-DMX?

The W-DMX technology lies at the heart of every one of our Black-Box products. W-DMX is specifically engineered by Wireless Solution Sweden AB to provide the same quality, reliability and performance as any hardwired DMX data link. In fact W-DMX gives you greater freedom to create reliable point-to-point, point-to-multipoint and even multipoint-to-multipoint installations over large distances.

Point-to-point operation



Multipoint-to-multipoint operation



W-DMX is unique in its use of certain advanced radio techniques which are more often found in mobile phone and military communications. Rather than using fixed frequency channels, W-DMX uses adaptive frequency hopping technology (as well as TDMA and GFSK techniques) to continually check for interference and to rapidly move operation over to clear radio channels. The frequency hops occur one thousand times every second to ensure smooth, efficient and robust operation.

The advantage of such technology will quickly become clear to you: consistent and wide ranging control of your lighting systems over potentially great distances.



wireless
solution

Specifications

DMX interface

- Full compliance with USITT DMX-512 (1990) & 512-A standards
- Maximum number of transceivers on a single bus: 32 (compliant with the EIA/TIA RS-485 standard)
- Data Rate: 250 kbps (slew rate limited to minimise EMI)
- Electrostatic discharge protection: $\pm 15\text{kV}$
- DMX frame rate and frame size: Auto sensing
- Frame rate: 1 (min) to 44 (max) frames per second
- Frame size: 1 (min) to 512 (max) channels
- Loss of DMX input or radio link: After one second (if there is no resumption), the DMX output will cease to transmit and go into a high impedance mode.
- Recovery from loss of DMX input or radio link: Less than 1 second.

Power characteristics

- High voltage input: 90-260VAC
- Low voltage input: 12VDC
- Low voltage output: 12VDC @ 300mA maximum
- Average current (receive mode): 200mA @ 12VDC
- Average current (transmit mode): 450mA @ 12VDC

RF characteristics

W-DMX™ uses Adaptive Frequency Hopping Spread Spectrum (AFHSS) and changes frequency every 910uS

- Operational frequency range: 2402-2479MHz (ISM band)
- EU/ASIA RF output power: 20dBm or 100mW
- FCC RF output power: 25dBm or 275mW
- Channel bandwidth: 1 MHz
- Sensitivity at 0.1% Packet Error Rate: 95dBm
- Tested link range 450m (Low power EU mode using standard antennae in an urban area)

Approvals

- FCC: 15.247&68 Class B; Canada ICES 003; Japan ARIB STD-T66
- CE; EN 301 489-1; 301 489-17; EN 300-328-1; EN 300-328-2; EN 609 50

Enclosure

- Injection moulded plastic casing, environmental rating: IP65
- Operating temperature range: -30°C to $+55^{\circ}\text{C}$ (-22°F to 131°F)
- Dimensions (W x H x D): 190 x 130 x 45mm (7.5" x 5.1" x 1.8")
- Weight: 750g / 26.45oz

Connectors

- AC input: 3-pole 5mm terminal via cable gland ($\varnothing 4\text{-}8\text{mm}$)
- DC in/out: 3-pole 5mm terminal via cable gland ($\varnothing 4\text{-}8\text{mm}$)
- DMX in/out: 3-pole 3.5mm terminal via cable gland ($\varnothing 4\text{-}8\text{mm}$)
- W-DMX bus: 5-pole 3.5mm terminal via cable gland ($\varnothing 4\text{-}8\text{mm}$)
- External MMI interface: 3-pole 3.5mm terminal
- N-type female radio antenna connector

Supplied accessories

- AC power cord / DC power connector / Standard antenna
- Antenna adaptor / Mounting brackets / User guide

Part codes

	S-1	S-2	R-512	RP-512
ETSI/FCC approved (power output: 100mW/300mW max.)	A40002	A40004	A40103	A40201
Japan ARIB approved (power output: 100mW max.)	A40002J	A40004J	A40103J	A40201J

Control panel details

S-1 and R-512 Outdoor

RADIO
ON: Indicates that *Level* display is showing signal strength
BATT Not used

Level Provides indication of radio input or output signal strength

FUNCTION
Press and release to search for and link with receivers

LINK
ON: Normal operation
FLASH: Unlinking all receivers
RAPID FLASH: Linking with receivers

DATA
ON: Transmitting DMX data
CTRL Not used

POWER
ON: Correct power input present

S-2 Outdoor

FUNCTION
Press and release to search for and link with receivers (for each universe)

LINK (for each universe)
ON: Normal operation
FLASH: Unlinking all receivers
RAPID FLASH: Linking with receivers

DATA (for each universe)
ON: Transmitting DMX data
CTRL (for each universe)
ON: Indicates that W-DMX bus link is active

RP-512 Outdoor

RADIO
ON: Indicates that *Level* display is showing signal strength
BATT
ON: Indicates that *Level* display is showing battery charge

Level Provides alternate indications of radio signal strength and battery charge every two seconds.

FUNCTION
Operation depends upon current operation mode: transmit or receive.

LINK
ON: Normal operation
FLASH: Unlinking all receivers
RAPID FLASH: Linking with receivers

DATA
ON: Transmitting/receiving DMX data
TX/RX
Indicate current operation mode

CTRL
ON: Indicates that W-DMX bus link is active
POWER
OFF: Off or using battery
ON: External power input
FLASH: Charging battery

Release 1-0d (October 2007) Specifications subject to change without notice